

DEPARTMENT OF ECOLOGY

P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-630 0

January 16, 2003

Jerome W. Morrissette & Associates, Inc., P.S. Attn: Trent Lougheed, P.E. 1700 Cooper Point Road SW, #B-2 Olympia, WA 98502-1110

Dear Mr. Lougheed:

Re: Preliminary Permit to Test Well #10 (S02) Under Ground Water Application G2-29382 for Lake Cushman Maintenance Co.

The above application requested the withdrawal of public ground water at the rate of 560 gallons per minute (gpm) from two wells, Lake Cushman Water System No. 3 Wells #2 and #10, for multiple domestic supply. This rate represents an increase of 160 gpm over that authorized under existing water rights. The applicant subsequently requested a preliminary permit to test Well #10. The well site for Well #10 is located within the NE½ SW½, Section 18, T. 23 N., R. 4 W.W.M., of Mason County.

The Department of Ecology (Ecology) has reason to believe that Wells #2 and #10 are in hydraulic continuity with Lake Cushman, tributary to the North Fork of the Skokomish River. Information must be submitted for Ecology to determine the effect of the proposed increase in withdrawal from the wells on the North Fork of the Skokomish River.

You are hereby granted a Preliminary Permit to proceed with testing of Well #10. It is important to note that the conditions of this Preliminary Permit must be complied with within the time period specified or else the application or applications upon which it is based shall be automatically canceled and the applicant so notified. Please make sure that your consultant and/or driller receive a copy of this Preliminary Permit to ensure compliance with all conditions. This letter serves as a Preliminary Permit subject to existing rights and the following conditions:

- 1. This Preliminary Permit will remain in effect until January 16, 2006 unless revoked sooner by Ecology.
- 2. All water wells constructed within the state shall meet the minimum standards for construction and maintenance as provided under Chapter 18.104 RCW (Washington Water Well Construction Act of 1971) and Chapter 173-160 WAC (Minimum Standards for Construction and Maintenance of Water Wells).
- 3. In accordance with WAC 173-160-205, wells shall not be located within certain



January 16, 2003 Page 2

minimum distances of potential sources of contamination. In general, wells shall be located at least 100 feet from a sewer, septic tank, privy, or other source of contamination. Wells shall not be located within 1,000 feet of a solid waste landfill. Minimum distances shall also comply with state and local health regulations.

- 4. An access port shall be installed and maintained. In order to facilitate accurate recovery data collection, the system shall incorporate backflow check-valve(s) that will prevent water from flowing back into the well when the pump is shut off.
- This aquifer test shall be supervised by and analyses conducted by a Washington licensed hydrogeologist or Washington registered engineer specializing in ground water evaluation. The well shall be tested at a constant rate no less than the maximum design rate at which the well will be used. The Washington State Department of Health (DOH) Water System Design Manual (DOH #331-123, June 99), Appendix E provides guidelines for designing and conducting an aquifer test (available at www.doh.wa.gov/ehp/dw). These test results are needed to properly analyze the effects of the proposed pumping. Failure to follow correct methodology such as that outlined in the DOH guidelines, may be reason to require that the aquifer test be repeated. For water table aquifers, pumped water produced during the test shall be routed away from all wells and discharged such that this water will not recharge the drawdown cone during the test.

For both unconfined (water table) and confined aquifer conditions, pumping shall be conducted for a minimum of 24 hours OR until the water level in the pumping well has been stable for at least four (4) hours, whichever occurs last. Stabilization is defined as a drop in water level of less than or equal to 0.1 foot of drawdown per hour during pumping. Additionally, for unconfined (water table) aquifer conditions, pumping shall be conducted for a maximum of 72 hours OR until drawdown has been detected in an observation well for a minimum of four (4) hours, whichever is shorter. Depth to water shall be measured in feet, using 10ths or 100ths of a foot rather than inches.

At the completion of pumping, recovery data shall be collected from all wells until the water level in the pumped well nears pre-pumping static conditions and the water-level recovery rate is less than 0.1 foot per hour. The test must be designed and conducted to determine the following:

a. The distance and time drawdown response within the producing aquifer to the proposed ground water withdrawal. To accomplish this, at least one observation well, completed in the same aquifer and within a reasonable distance, shall be shut off and monitored for drawdown, recovery and water quality during the aquifer test.

- b. Aquifer transmissivity.
- c. Aquifer storage coefficient or specific yield.
- d. The potential effect of the proposed ground water withdrawal on the North Fork of the Skokomish River, as well as existing ground water and surface water users, wetlands, springs, lakes, streams, etc.
- 6. Please be aware that the state or county health department may require water quality testing prior to the approval of your project. If your project involves a public water system, please check with the appropriate health agency to determine what testing is required prior to conducting the test.
- When aquifer testing is complete, the applicant shall provide a report describing all findings concerning hydrology, hydrogeology, and the pumping test(s). In general, the report should address the concerns in Item 5 above and contain information on: raw and corrected (if corrected) water levels, pumping rates, duration of pumping and recovery, distances between wells, land surface elevations (including the method used for determining), well-construction diagrams and lithology (well logs for the pumping well and all monitoring wells), total depth and screened interval depths for all wells, pump intake depth for the pumping well, elevations and descriptions of measuring points for all wells, hydrogeologic cross-sections, maps showing pertinent conditions (such as well and surface water locations, water level changes, etc), graphs, and a description of the hydrogeologic system. The report must provide Ecology with sufficient information to evaluate the test results and analyses.

In addition, the report should include copies of the field data sheets and a discussion of the methods and calculations employed during determination of aquifer characteristics and a copy of all laboratory test results. Ecology may request data in electronic format (such as a spreadsheet).

- 9. All expenses, risks, and liabilities incurred during well testing shall be borne by the applicant. If senior water right holders are adversely affected during any portion of the aquifer test, the test shall be terminated immediately.
- 10. This Preliminary Permit grants the right to pump this well at an increased rate for testing purposes only. Once testing is complete, the maximum rate of withdrawal from Well #10 shall be limited to 100 gpm as authorized under Certificate #G2-27597C.
- 11. The granting of this Preliminary Permit shall not be construed, by inference or otherwise, that subject application will ultimately be approved.

January 16, 2003 Page 4

This Order (preliminary permit) may be appealed pursuant to RCW Chapter 43.21B. The person to whom this Order is issued, if he or she wishes to file an appeal, must file the appeal with the Pollution Control Hearings Board within thirty (30) days of receipt of this Order. Appeals must be sent to: Pollution Control Hearings Board, P.O. Box 40903, Olympia, WA 98504-0903. At the same time, a copy of the appeal must be sent to the Department of Ecology, Water Resources Appeals Coordinator, P.O. Box 47600, Olympia, WA 98504-7600. All others receiving notice of this Order, who wish to file an appeal, must file the appeal with the Pollution Control Hearings Board within thirty (30) days of the date the Order was mailed. The appeal must be filed with both the Pollution Control Hearings Board and the Department of Ecology, in the same manner as described above.

Should you have any questions regarding this Preliminary Permit or the water right application please contact Marie Peter at (360) 407-0279. For questions regarding testing requirements, please contact Tammy Hall at (360) 407-6099.

Sincerely,

J. Mike Harris
Section Supervisor

Water Resources

JMH:MP:th

Cc: Jerrod Davis, Washington State Department of Health

Trent Lougheed Morrissette & Assoc 352-9456

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Requesting Cost Recovery—
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RECEIVED
DEPT. OF ECOLOGY/SWR0

October 14, 2002

Marie Peter
W.S. Department of Ecology
Water Resources, Southwest Region
P.O. Box 47775
Lacey, WA 98504-7775

Subject:

Preliminary Permit for Well #10 (SO2) - Lake Cushman Water System #3

System ID#03528F

Dear Ms. Peter:

Per my discussions with Vicki Cline today, this letter shall serve as a formal request for a Preliminary Permit for Well #10 (SO2) at the Lake Cushman Water System #3 (System ID#03528F). The purpose for this permit is to allow the Lake Cushman Maintenance Company to perform a pump test at their existing Well #10. This pump test will withdrawal approximately 295 gallons per minute (gpm) for 24 hours. The water from this pump test will be put to beneficial use by filling the existing reservoir (however, due to the proposed quantity of water, some is anticipated to be discharges via overflow of the reservoir).

The purpose of this pump test is to determine the sizing of a new well pump that is anticipated to reduce the total reservoir volume requirement from 300,567 gallons to 112,617 gallons for maximum build-out of the system (resulting in a total savings of approximately \$180,000). This storage requirement reduction is demonstrated in the attached Source and Storage analyses. The justification of this reduction based on intended water right increases has been discussed with Jerrod Davis of the Department of Health (DOH).

Well #2 (SO1) and Well #10 (SO2) currently have instantaneous withdrawal water rights of 265 gpm and 100 gpm, respectively, under water right Certificate #G2-27597C. The pending application (G2-29382) for Lake Cushman System #3 currently in process with the Department of Ecology (DOE) is requesting an instantaneous withdrawal of 560 gpm for both wells (umbrella water right), which would result in 295 gpm being available for Well #10. The reasoning DOE has given for the original water rights granted being only a fraction of that requested at that time was that it was assumed that most of the lot owners up in the Lake Cushman area would be "recreational use", however this is not the case. The majority of the current water system connections within the Lake Cushman water systems are full time residential connections. This is the reason that new water right applications were submitted in 1996 for both instantaneous and cumulative demands.

The intent of this pump test is to determine if a new well pump capable of producing 295 gpm can be installed, which would reduce the amount of storage required under the DOH sizing criteria. Assuming



that the pump test indicates this is viable, a new pump would be installed (with project approval by DOH). Once installed, a gate valve within the pump house would be partially closed (creating a false head) to limit the new pump to 100 gpm (based on current water rights). Once future water rights are granted, the valve would be opened to allow full beneficial of the increased instantaneous withdrawal allowed by the new water rights.

When all results from the pump test have been analyzed, a "Completion Report" letter with the pump test results will be submitted to DOE. It should be noted that the pump test (once scheduled with the well driller) could be conducted over one month from the date of the requested Preliminary Permit is granted since the well driller's schedule is quite full. Once the well pump replacement project is completed, the reservoir replacement project for this system will be submitted to DOH for approval.

Additionally, the Lake Cushman Maintenance Company has requested me to inquire on the status of the pending water right applications (G2-29381 and G2-29382) as they are in dire need of additional water rights for both instantaneous and cumulative withdrawal for both water systems.

Your expedience in processing this request is greatly appreciated. If you have any questions, please feel free to contact me at (360) 352-9456 at your convenience.

Sincerely,

Trent J. Lougheed, P.E.

Project Engineer

cc: Dan McGrady, Lake Cushman Water System Manager Jerrod Davis, Washington State Department of Health

DEPT. OF ECOLOGY/SWRO

JAN -9 A10:54

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY NOTICE OF APPLICATION TO APPROPRIATE PUBLIC WATERS TAKE NOTICE:

That Lake Cushman Maintenance Company of Hoodsport, Washington on May 1, 1996, under Application No. G2-29382 filed for a permit to appropriate public waters, subject to existing rights, from two wells in the amount of 560 gallons per minute as needed year round each year for multiple domestic supple. The source of the proposed appropriation for Wel #2 is located within the SE1/4 NW1/4, and NE1/4 SW1/4 for Well #10 both within Section 18, T. 23 N., R. 4 W.W.M., of Mason County Washington.

Protests of objections to approval of this application must include a detailed statement o the basis for objections; protests must be accompanied by a two dollar (\$2.00) recording fee and filed with the Department of Ecology, a the address shown below, within thirty (30)

days from: December 26, 2002.

Department of Ecology, SWRO PO Box 47775 Olympia, Washington 98504-7775 12/19-26 2

Affidavit of Publication

STATE OF WASHINGTON, **COUNTY OF MASON**

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. 4 W.W.M., of Mason County,	paper is a legal newspaper and it is now and has been for more than six months prior to the
AND THE RESERVE AND THE PARTY OF THE PARTY O	date of the publication hereinafter referred to, published in the English language continuously as a weekly newspaper in SHELTON, Mason County, Washington, and it is now
objections to approval of this	and during all of said time was printed in an office maintained at the aforesaid place of
st include a detailed statement of	publication of said newspaper. That the said SHELTON-MASON COUNTY JOURNAL
bjections; protests must be ac- a two dollar (\$2.00) recording	was on the 9th day of August, 1941, approved as a legal newspaper by the Superior Court
th the Department of Ecology, at	of said Mason County.
hown below, within thirty (30)	Notice of Appl Me
ember 26, 2002.	That the annexed is a true copy of a Notice of Appl. To
t of Ecology, SWRO	Appr. Public Waters No. G2-29382
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12/19-26 2t	Lake Cushman Maintenance Company
	as it was published in regular issues (and not in supplement form) of said
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	newspaper once each week for a period of two
	consecutive weeks, commencing on the
	19th day of December , 20 02 , and ending on the
	day of, and chang on the
	26th day of December , 20 02 , both dates inclusive,
	and that such newspaper was regularly distributed to its subscribers during all of the said
	period. That the full amount of the fee charged for the
	foregoing publication is the sum of \$50.76
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	Subscribed and sworn to before me this 26th day of
WHITTO ANN DOSSILL	December,2002
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DEPARTMENT OF ECOLOGY

November 1, 2002

P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

Lake Cushman Maintenance Co N 3740 Lake Cushman Road Hoodsport WA 98548

Dear Sir or Madame:

Re: Water Right Application No. G2-29382

We have received your application for appropriation of water and it has been assigned the number referenced above. If you contact us in the future regarding this application, it will help us serve you more quickly if you refer to this application number.

Please complete the following two steps:

1. Enclosed is a notice of your application, which must be published <u>once a week for two consecutive weeks</u> in a newspaper published in **Mason** County. The newspaper should have general circulation in the locality where the water is to be diverted and used, and must be qualified as a legal newspaper. Publishing the notice in a remote part of the county, when not necessary, may be cause for you to be required to republish the notice in a designated newspaper. The enclosed newspaper list may help you select an appropriate newspaper for the area.

Publication should start within 30 days from the date of this letter.

To assure accuracy, it is your responsibility to check the notice carefully before having it published. If you find an error, please contact this office for correction and/or resolution. If we later find an error in your public notice, you will be required to re-publish an amended notice at your expense.

2. After publication, the publishing newspaper should provide you with a notarized original Affidavit of Publication, which should be forwarded to our office as soon as possible. Please do not send a photocopy of the affidavit.

Community water systems are required to be approved by either the local health department or the Department of Health depending upon system size. If you have not already done so, we suggest that you contact either your local health department or the Department of Health, Southwest Drinking Water Operations, Thurston Airdustrial Center, Bldg 3, PO Box 47822, Olympia, Washington 98504-7822 for further information.

If you have any questions or concerns about any of this information, please call (360) 407-0240. Thank you for your attention to this matter.

Sincerely.

Water Resources Program

SC:th (affidavit of publication.doc)

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DEPARTMENT OF ECOLOGY

NOTICE OF APPLICATION TO APPROPRIATE PUBLIC WATERS

TAKE NOTICE:

That Lake Cushman Maintenance Company of Hoodsport, Washington on May 1, 1996, under Application No. G2-29382 filed for a permit to appropriate public waters, subject to existing rights, from two wells in the amount of 560 gallons per minute as needed year round each year for multiple domestic supply. The source of the proposed appropriation for Well #2 is located within the SE¼ NW¼, and NE¼ SW¼ for Well #10 both within Section 18, T. 23 N., R. 4 W.W.M., of Mason County, Washington.

Protests of objections to approval of this application must include a detailed statement of the basis for objections; protests must be accompanied by a two dollar (\$2.00) recording fee and filed with the Department of Ecology, at the address shown below, within thirty (30) days from:

(Last date of publication to be entered above by publisher)

NOTICE MUST BE PUBLISHED ONCE A WEEK FOR TWO CONSECUTIVE WEEKS

Department of Ecology, SWRO PO Box 47775 Olympia, Washington 98504-7775

ECY 040-1-1 Rev 2/79

Notice





DEPARTMENT OF ECOLOGY

P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

May 17, 1996

Dear Water Right Applicant:

Re: Water Application No. G2-29382

We have received your application for a water right and it has been assigned the application number indicated above. Please refer to it by number in future correspondence.

Due to shortage of staff to meet the demand for service, new applications are being accepted and filed for future processing, but a public notice will <u>not</u> be sent at this time. Because we have over 500 pending applications for water rights in this region, it may be some time before we can get to your application. When we begin processing your application, this office will prepare a public notice and send it to you with publication instructions. It is very important that you notify this office of any change of address or ownership of the property.

Please keep in mind that filing an application for water use does not authorize use of the water. With the many complexities of water law, including issues like senior rights, fish habitat, and instream flows, favorable permit decisions are not always possible. We regret that a decision on your application cannot be made sooner and we strongly advise against investing further in your project until such time as a water right permit is issued.

If you still have questions, please call (360) 407-0240. To better manage limited staff time, we have set the following office hours:

Telephone Calls

Walk-Ins

Mondays and Wednesdays 8:00 am to 4:00 pm

Tuesdays and Thursdays 8:00 am to 12:00 (noon)

Our staff will respond to your questions and concerns as soon as possible. Thank you for your continued patience.

Sincerely.

Gale Blomstrom Regional Supervisor

Jace Blomation

GB:th Enclosures

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